



U.S. Coast Guard Marine Safety Office, Portland, Maine



SAFETY ALERT '01-02 **Life Raft – Hydrostatic Release Installations**

Commercial fishing vessels that are required to have life rafts equipped with SOLAS A or B packs must ensure that in times of emergency, the raft will properly float free from their vessel. Hydrostatic releases are not mandatory, but are the most common float free set up, and should remove any temptation to tie the raft down. Improperly rigged hydrostatic releases are a common problem identified by Coast Guard Commercial Fishing Vessel Examiners during Voluntary Dockside Examinations.

Viking and Hammar hydrostatic releases are the most common types used by fishermen. Both designs are similar in that they cut or release a retaining line/strap that secures the life raft to its mount. After the retaining line releases, the life raft floats free from its mount, while its painterline remains attached to the vessel by a weak link. As the vessel sinks, the painter-line pays out about 100 ft and activates the raft's CO2 inflation system. The buoyancy of the inflated life raft breaks the weak link, allowing the raft to float to the surface.

Figures 1 and 2 illustrate proper installations for the Viking and Hammar type hydrostatic releases.

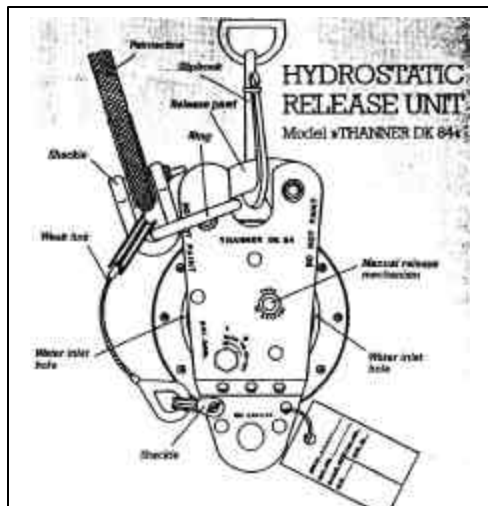


Figure 1. Proper installation of Viking release

If the release is improperly rigged, or the raft is tied down, the life raft will be pulled down with the vessel. The most common mistakes include: attaching the

painter-line directly to the retaining line pelican hook, attaching the weak link to the retaining line instead of the painterline, tying the painter to the cradle without a weak link, lashing the raft to the vessel, and not replacing or servicing the hydrostatic release when required.

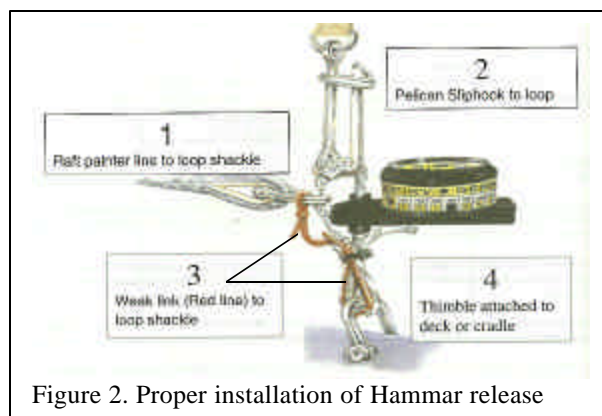


Figure 2. Proper installation of Hammar release

Figure 3 is an example of a bad installation (note how the painter-line is improperly shackled to the retaining line). If this vessel sank, this life raft would sink with it.



Figure 3. Improperly installed Hammar release

The Hammar Company has a web-based interactive training aid for properly rigging their hydrostatic release.. To see it, log on to: www.hammarcompany.com.

For more information please contact:

Commercial Fishing Vessel Safety, (207) 780-3256 / 3079
USCG Marine Safety Office, 103 Commercial Street, Portland Maine, 04101
<http://www.uscg.mil/d1/units/msoport/>



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